ELK

The diet of Rocky Mountain Elk in Colorado varies from being primarily grazers to browsers as snow covers the grass/forb layer and as elk migrate from summer to winter range. It appears, however, that they remain grazers as long as possible, choosing highly digestible and energy efficient grasses when they are available. Conservation Reserve Program fields have provided some of these high energy wintering areas in certain parts of the state. While providing elk a winter food source, these fields are also serving as a buffer to other private parcels that are being farmed or grazed by domestic livestock. Although elk use certain CRP fields throughout the year, there are several areas of western Colorado where significant numbers of elk are using CRP fields exclusively. Some of these fields are wintering in excess of 1,000 animals and sustaining these animals is dependent on the fields remaining in CRP.

The Division of Wildlife has identified key parcels of CRP that, if not re-enrolled would have a significant impact on the local elk population. Although keeping these fields in CRP is the highest priority, some improvement in adjacent pastures could be very beneficial in buffering negative impacts of elk on nearby lands. Additionally, improvement practices on adjacent non-CRP grazed or hayed land would not only benefit elk, but would improve the site for domestic livestock. These lands could be voluntarily enrolled into a WHIP or EQIP contract for pasture improvement practices.

The following guidelines may be used when writing specifications for wildlife practices for elk in Colorado. These are guidelines only. They may need to be adapted to individual situations and site requirements.

FERTILIZATION

Follow NRCS Practice Standard 645, Wildlife Upland Habitat Management, and 510, Pasture and Hayland Management. Fertilization of pastureland is done to improve the growth and palatability of forage for elk and cattle. It may also be used as a short-term tool to draw elk onto fertilized fields and away from places where they are unwanted. These guidelines are applicable to severe elk winter range. Go to the Natural Diversity Information System at http://ndis.nrel.colostate.ecu/escop for a map of severe elk winter range and winter concentration areas.

Guidelines:

- Follow recommended fertilization rates according to a soil test.
- Treat a minimum of 200 contiguous acres.
- Treatment should occur between September and November.
- Treatment can be applied to parcels with up to 10 inches of snow.
- Treatment may not be applied where it is adjacent to flowing water because of the potential for water contamination.
- Use caution when applying to areas infested with noxious weeds.
- Treatment may be repeated every six or seven years.

RANGE SEEDING

Follow NRCS Practice Standard 645, Wildlife Upland Habitat Management and 550, Range Seeding according to the guidelines found below. These guidelines are applicable to severe elk winter range. Go to the Natural Diversity Information System at http://ndis.nrel.colostate.ecu/escop for a map of severe elk winter range and winter concentration areas.

Guidelines:

Piñon-Juniper

- A combination of the following species should be seeded at the rates recommended in Plant Materials Technical Note #59. Check the Ecological Site Descriptions for suited native species.
- Grasses: thickspike wheatgrass, bluebunch wheatgrass, big bluegrass, Indian ricegrass, green needlegrass, sheep fescue.
- Forbs: small burnet, Lewis flax, cicer milkvetch, sainfoin, prostrate summer cypress.
- Shrubs: mountain big sagebrush, Wyoming big sagebrush, fourwing saltbush.
- Seeding rate should be as close to 50- 70% grasses, 10-15% forbs and 10-15% shrubs as possible. Seeding/application method should be appropriate to site conditions. Other seeding procedures should follow guidance in NRCS Practice Standard 550, Range Seeding.

Sagebrush

- A combination of the following species should be seeded at the rates recommended in Plant Materials Technical Note #59, Seeding Rates. Check the Ecological Site Descriptions for suited native species.
- Grasses: big bluegrass, Indian ricegrass, bluebunch wheatgrass, sheep fescue, western wheatgrass.
- Forbs: cicer milkvetch, prostrate summer cypress, small burnet, sainfoin.
- Shrubs: Wyoming big sagebrush, mountain big sagebrush, black sagebrush.
- Seeding rates should be as close to 65% grasses, 15% forbs, and 15% shrubs as possible. Seeding/application method should be appropriate to site conditions. Other seeding procedures should follow guidance in NRCS Practice Standard 550, Range Seeding.

Oakbrush

- A combination of the following species should be seeded at the rates recommended in Plant Materials Technical Note #59, Seeding Rates. Check the Ecological Site Descriptions for suited native species.
- Grasses: thickspike wheatgrass, western wheatgrass, meadow brome, pubescent wheatgrass
- Forbs: Utah sweetvetch, Rocky Mountain penstemon
- Seeding rates should be as close to 75 to 85% grasses and 15 to 25% forbs as possible. Seeding/application method should be appropriate to site conditions. Other seeding procedures should follow guidance in NRCS Practice Standard 550, Range Seeding.

BRUSH MANAGEMENT

Follow NRCS Practice Standard 645, Wildlife Upland Habitat Management and 314, Brush Management according to the guidelines found below. These guidelines are applicable to severe elk winter range. Go to the Natural Diversity Information System at http://ndis.nrel.colostate.ecu/escop for a map of severe elk winter range and winter concentration areas.

Guidelines:

- Apply only in areas where brush canopy exceeds 20% and brush condition is decadent or overmature.
- Control should be restricted to strips not wider than 100 yards with untreated strips of 100 yards on either side of the treated area.
- Control should not exceed 30 to 40 % of the brush in the area.
- Control not to exceed once/site every 10 to 15 years.
- Grazing by domestic livestock must be deferred on treatment area during the first growing season. Adequate recovery periods must follow each grazing event to maintain desirable species.
- Treatment may include brush beating, disking, or selective chemical treatment as long as the above criteria are adhered to.

- If herbicides are used, consult a licensed pesticide professional for herbicide recommendations. Type and amount of chemical to be applied must be according to all pesticide laws.
- In areas where sage grouse and mule deer are found, brush manipulation measures must account for grouse and deer habitat needs in addition to elk needs.

PRESCRIBED GRAZING

Follow NRCS Practice Standard 645, Wildlife Upland Habitat Management and 528A, Prescribed Grazing according to the guidelines found below. These guidelines are applicable to severe elk winter range. Go to the Natural Diversity Information System at http://ndis.nrel.colostate.ecu/escop for a map of severe elk winter range and winter concentration areas.

Guidelines:
- Minimum pasture size should be 200 acres.
- Each paddock should be protected from livestock grazing at least one of every 3 to 4 years.
- Electric fences should be used whenever feasible to allow ease of installation.
- At least 20% of the land will be deferred year-long from grazing of domestic livestock.
- NRCS guidelines will be followed on remaining pastures.